



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VII
901 NORTH 5TH STREET
KANSAS CITY, KANSAS 66101

JAN 03 2012

OFFICE OF
THE REGIONAL ADMINISTRATOR

Colonel Anthony Hofmann
District Engineer
U.S. Army Corps of Engineers
601 East 12th Street
Kansas City, Missouri 64106-2896

Dear Colonel Hofmann:

This letter is in reference to the November 9, 2011 Public Notice, for the Rivers and Harbors Act Section 10 permit applications by Kaw Valley Companies, Inc. (NWK-2011-1460), Holliday Sand & Gravel Company (NWK-2011-1462), Master's Dredging (NWK-2011-1465), Penny's Aggregates, Inc. (NWK-2011-1466), and Meier's Ready Mix/Victory Sand Mining & Dredging, LLC (NWK-2011-1463). These applicants propose to dredge sand and gravel from the bed of the Kansas River, also known colloquially as "the Kaw."

The U.S. Environmental Protection Agency Region 7's December 9, 2011 letter (attached), raised concerns about potential adverse impacts to Waters of the United States from the proposed dredging permits. The EPA advised the Corps that the proposed dredging may result in substantial and unacceptable impacts to the Kansas River, which the agency designates an aquatic resource of national importance.

The EPA's further analysis of these proposed permits has resulted in this agency's determination that the proposed dredging activities will result in substantial and unacceptable impacts to the Kansas River. Pursuant to Part IV paragraph 3(b) of the August 11, 1992 Memorandum of Agreement, between the EPA and the U.S. Army Corps of Engineers regarding Section 404(q) of the Clean Water Act, the agency hereby notifies the Corps of this determination.

Many reasons support the EPA's designation of the Kansas River an aquatic resource of national importance. The River's 170 miles drain approximately 53,000 square miles of Nebraska, Colorado and Kansas. Its prairie watershed encompasses Kansas' Flint Hills and other scarce and distinctive prairie systems. Its vital habitats support threatened and endangered species that utilize the river corridor, such as least tern, piping plover, and pallid sturgeon. One of only three public rivers in Kansas, the Kaw provides unique recreational opportunities attracting participants from across the nation. Vital infrastructure on the Kansas River includes dams, public water intakes, and bridges. The river supplies a primary source of drinking water for over one million people living in northeast Kansas. All these services are of a national importance. Additionally, the reach of the River between Interstate-635 and the Delaware River confluence is on the National Park Service's Nationwide Rivers Inventory, a federal designation that the River possesses "one or more 'outstandingly remarkable'" natural or cultural values judged to be of more than local or regional significance (<http://www.nps.gov/ncrc/programs/rta/nri/>).



According to the Corps' November 9, 2011 Public Notice, the dredging applicants propose to 1) expand the geographic scope of the dredging, including re-opening previously closed reaches of the Kansas River; and 2) remove approximately 45 percent more sand and gravel than the cumulative allowable extraction limits of the present dredging authorizations. The Public Notice requested comments to assess whether new circumstances or information about the environmental concerns and effectiveness of the 1990 "Final EIS" and 1991 "Regulatory Plan" warrant their reconsideration as the Corps administers permit applications for commercial dredging of the Kansas River.

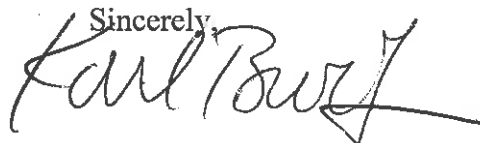
The EPA's December 9, 2011 letter, requested additional information and updated environmental review regarding river stability, water quality, aquatic species and habitat, recreation, and the range of alternatives. The agency continues to emphasize that the Corps needs to provide data outlined in that letter, provide additional opportunity for public comment, and incorporate new data into this environmental review prior to issuing any new permits for these applications. The EPA has not received the requested additional information that would resolve the following issues:

- The impacts of dredging on bed and bank stability of the Kansas and Missouri Rivers: The EPA believes current monitoring is inadequate to assess bank stability, presence of migrating head cuts, overall sediment load of the Kansas River, impacts to infrastructure, effects on the water table, or other environmental concerns. Further, the current monitoring scheme and other data from the state of Kansas demonstrate that bed degradation is occurring at several locations along the Kansas River and indicates that the Kaw cannot sustain current, let alone proposed future, dredging. The EPA continues to recommend that the Corps complete additional analysis regarding the potential impact of dredging on bed degradation and stability of the Kansas River, its tributaries, and the Missouri River. This analysis should consider new information, including the study funded by the Kansas Department of Wildlife, Parks and Tourism and carried out by Kansas State University researchers on the Kansas River due for release in January 2012. We recommend that the Corps provide additional opportunity for public comment after the release of the KSU study. Additionally, the agency recommends that the Corps prepare a sediment budget for the Kansas River that ties in with ongoing Missouri River Feasibility Study to inform permit decisions prior to reauthorization of the next round of Kansas River or Missouri River dredging permits under their 5-year review cycles.
- The extent to which dredging impacts water quality of the Kansas River: The EPA's December 9, 2011 letter, provided information regarding Clean Water Act Section 303(d) impairments and Total Maximum Daily Loads for the relevant segments of the Kansas River. Dredging significantly degrades waters by increasing turbidity, total suspended-solids, and re-suspending metals, pesticides, nutrients and organic contaminants present in the sediments, thus exacerbating water quality problems. The EPA continues to request documentation of the processes utilized at each permittee's facility, and a characterization of the nature and scope of each facility's discharges back to the river. The agency recommends that the potential impacts to water quality both during extraction of materials and from return water into the Kansas River be assessed in the environmental review.
- The extent to which commercial dredging in the Kansas River affects aquatic species and their habitats: Additional information should include data documenting the Corps' consideration of the impacts of dredging on recovery of pallid sturgeon in the Missouri River basin and other threatened or endangered species listed by the KDWPT or the U.S. Fish and Wildlife Service. The EPA recommends the Corps' environmental review consider new monitoring data and document additional consultation with KDWPT and USFWS.

- The extent to which dredging affects recreation and public safety on the Kansas River: The EPA continues to recommend that potential effects of dredging on maintaining recreational uses of the river be reevaluated under current and foreseeable future conditions. The environmental assessment should quantify the changes in economics surrounding recreation on the Kansas River due to increases in recreational and related business opportunities on the River, public safety concerns, and stability of public recreation infrastructure, aesthetics and noise.
- Consideration of a reasonable range of alternatives: The EPA believes the 1990 Final Environmental Impact Study did not adequately assess the full range of alternatives for current and foreseeable future conditions for the local and regional economies. The agency recommends the Corps reexamine the range of alternatives, and reassess all alternatives utilizing current data, including the alternative of moving to suitable pit mines off-river and/or restricting dredging to impounded areas.

For the reasons cited in this and in our previous letter, and in consultation with USFWS and KDWPT, the EPA believes the proposed dredging projects will result in substantial and unacceptable adverse impacts to aquatic resources of national importance. Based on the information currently available, the EPA believes the 2011 Public Notice, 1990 Final EIS and 1991 Regulatory Plan do not contain sufficient information and current environmental review necessary on which to base permit decisions. Thus, the agency recommends that permits not be issued until sufficient environmental information is available about the potential impacts from current and proposed dredging projects, and the Corps has provided greater opportunity for public participation and comment.

The EPA appreciates the opportunity to comment on these proposed permits, and looks forward to meeting with the Corps to discuss information needs and next steps. If you have any questions regarding our comments, please contact me or Steve Kovac of my staff at (913) 551-7698.

Sincerely,


Karl Brooks

Enclosure

cc: Mr. Kale Horton, Kansas City District, Corps
Mr. Mark Frazier, Kansas City District, Corps
Ms. Susan Blackford, USFWS
Mr. Jason Luginbill, KDWPT
Mr. David Bender, KDWPT
Scott Satterthwaite, KDHE



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 7
901 NORTH 5TH STREET
KANSAS CITY, KANSAS 66101

DEC 9 2011

Colonel Anthony Hofmann
District Engineer
U.S. Army Corps of Engineers
601 East 12th Street,
Kansas City, Missouri 64106-2896

Dear Colonel Hofmann:

The U.S. Environmental Protection Agency Region 7 has reviewed the November 9, 2011 Public Notice for the Rivers and Harbors Act Section 10 permits Kaw Valley Companies, Inc. (NWK-2011-1460), Holliday Sand & Gravel Company (NWK-2011-1462), Master's Dredging (NWK-2011-1465), Penny's Aggregates, Inc. (NWK-2011-1466), and Meier's Ready Mix/Victory Sand Mining & Dredging, LLC (NWK-2011-1463) for the proposed dredging from eleven locations on the Kansas River, Kansas. The recommendations herein have been prepared under the authority of and in accordance with Section 10 of the Rivers and Harbors Act of 1899 (33 USC 403). Pursuant to Part IV, Paragraph 3(a) of the August 11, 1992, Memorandum of Agreement between our agencies relative to Section 404(q) of the Clean Water Act, we believe the proposed dredging projects may result in substantial and unacceptable impacts on aquatic resources of national importance. The following is a summary of the EPA's preliminary findings with respect to the proposed projects.

Five companies are currently authorized to dredge sand and gravel for commercial sale from ten locations (cumulative total for all companies) on the Kansas River. All existing commercial dredging permits will expire on December 31, 2012. The public notice states that commercial sand and gravel dredging operations on the Kansas River utilize hydraulic cutter-suction dredges mounted on barges to convey a sand and gravel slurry to shore based facilities for processing. Excess water is drained from the sand and gravel, processed, and transported to settling ponds before being routed back to the Kansas River.

Under the proposed permits, these companies propose to 1) expand geographic scope, including re-opening previously closed reaches of the Kansas River, and 2) increase by about 45% the cumulative allowable extraction limits of the dredging authorizations as summarized in Table 1:

Table 1. Summary of Dredge Activities Described in Public Notice

Company	River Miles		Cumulative Allowable Extraction (Tons)	
	Current Authorized	Requested	Current Authorized	Requested
Kaw Valley	9.4 – 10.4	9.4 - 16.9	400,000	500,000
	12.8 – 13.9			
	15.4 – 16.9			
Holliday Sand & Gravel	18.65 – 20.15	18.65 – 20.15	300,000	300,000
	21.0 – 21.15	20.55 - 21.15	300,000	300,000
Master's Dredging		26.1 - 27.6		300,000
		28.3 - 29.8		300,000
	42.6 – 44.1	42.6 – 44.1	750,000	750,000
	47.1 – 48.0	47.1 – 48.0		
	45.2 – 46.7	45.2 – 46.7		
Penny's Aggregate	49.6 – 51.35	49.6 – 51.35	150,000	150,000
Victory Sand / Meier's Ready Mix	77.1 – 78.6	77.1 – 78.6	300,000	300,000
		90.1 - 91.6		300,000
Total			2,200,000	3,200,000

In January 1990, the U.S. Army Corps of Engineers, Kansas City District completed the “Final Regulatory Report and Environmental Impact Statement – Commercial Dredging Activities on the Kansas River, Kansas.” The document was prepared to address dredging-related impacts to the Kansas River and adjacent lands. The selected alternative for the Environmental Impact Statement is a “Regulatory Plan” which consists of restrictions and a monitoring program to limit dredging-related impacts. The Regulatory Plan was implemented in 1991.

The Public Notice requests comments to assess the potential for new circumstances or information relevant to the environmental concerns and effectiveness of the Final EIS and Regulatory Plan in the administration of permit applications for commercial dredging activities on the Kansas River. This is part of the Corps’ continual review process for this five year permit cycle to ensure the effectiveness of the Regulatory Plan after its initial approval in 1990.

The EPA has previously questioned the effectiveness of the Final EIS and Regulatory Plan (Vicky Johnson email comments 3/9/2011, NWK-2003-01759) considering the age of the documents and the potential for new conditions, science, and information. However, in order for the EPA to conduct a thorough evaluation of the environmental concerns and effectiveness of the Final EIS and Regulatory Plan, additional information is needed. Our initial assessment indicates that there are new circumstances and information pertaining to river stability, water quality, aquatic species and habitat, recreation, and range of alternatives that must be addressed in the environmental review of these permits.

River Stability

More information is needed to assess the impacts of dredging on bed and bank stability of the Kansas River. The monitoring data collected according to the Regulatory Plan is limited, providing only cross-sectional surveys every two years. This data is not adequate to assess bank stability, presence of migrating head cuts, overall sediment load of the River, impacts to infrastructure, effects on the water table, or other environmental concerns. This data does show that in all but one of the reference cross-sections, the river has experienced a downward trend in bed elevation since 1991.

Similarly, the September 2010 Corps' study, "Hydrologic and Geomorphic Changes on the Kansas River," examined cross-sectional data and stage-discharge relationships for the Kansas River, but did not include sedimentation modeling. This study showed that "bed elevations shift noticeably over any two-year period," with some reaches experiencing degradation, and only one reach experiencing aggradation as a result of the 1993 flood. This brings into question both the effectiveness of bi-annual monitoring to track changes in bed elevation, and the ability of the river to sustain current and future dredging. The study suggests "possibilities" for where the river recovers sediment lost to dredging, such as, bank failures and tributary degradation. Another possibility the study suggests is "that a threshold dredging level exists below which dredging reduces the total sediment yield to the Missouri River without causing significant changes to the Kansas River."

In light of the significant degradation issues in the Kansas City Reach of the Missouri River, it is important to determine the relationship between dredging, sediment delivery, and degradation of the Kansas River and the Missouri River near their confluence. The District completed a Reconnaissance Study of Missouri River bed loss in the Kansas City metropolitan area in 2009 which identified a federal interest warranting further study. In addition, the District is presently working with local sponsors on a Feasibility Study for addressing river bed degradation in the Missouri River and its tributaries from Rulo, Nebraska to St. Charles, Missouri, with particular interest in impacts to infrastructure in the Kansas City metropolitan area. Other monitoring by the Kansas Water Office is focused on addressing bed degradation of the Kansas River and protection of infrastructure along that corridor.

There are issues which need to be addressed regarding bed degradation and stability of the Kansas River, its tributaries, and the Missouri River, and the potential impacts of dredging. A study funded by the Kansas Department of Wildlife and Parks and carried out by Kansas State University researchers on the Kansas River is due for release by the end of December, which may inform the resource agencies and the public regarding the effectiveness of the Final EIS and the Regulatory Plan. Preliminary findings indicate riverbed incision in dredged reaches is most likely causing excessive bank erosion both upstream and downstream of dredge sites.

Considering that the current permits do not expire until the end of 2012, we recommend that the

Corps provide additional opportunity for public comment after the release of the KSU study. Additionally, we recommend that a sediment budget be completed for the Kansas River that ties in with the Missouri River Feasibility Study to inform permit decisions prior to reauthorization of the next round of Kansas River or Missouri River dredging permits under the 5-year review cycle.

Water Quality

The Final EIS does not address current water quality issues on the Kansas River. The Kansas River segments in the proposed dredging locations are listed on the 2010 Kansas Section 303(d) list for lead (Pb), total phosphorus, total suspended solids, polychlorinated biphenyls, and copper, Table 2. Total Maximum Daily Loads have been approved by the EPA for the river for biology/sediment, *Escherichia Coli*, nutrients/biological oxygen demand, chlordane, biology, and fecal coliform bacteria, Table 2. Dredging has the potential to increase turbidity, TSS, and re-suspend metals, pesticides, nutrients, and organic contaminants present in the sediments, thus exacerbating water quality problems.

The Public Notice states that the excess water is drained from the sand and gravel, processed, and transported to settling ponds before being routed back to the Kansas River. Additional information is needed on each facility's use of settling ponds, or other methods to manage the excess water, and the effectiveness of these methods for removing contaminants. We request documentation of the processes utilized at each facility, and a characterization of the nature and scope of each permittee's discharges back to the river. The potential impacts to water quality both during extraction of materials and from return water into the Kansas River must be assessed in the environmental review. The review should consider all the TMDL endpoints, the state TMDL implementation process needed to meet state water quality standards and the potential for significant degradation of waters.

Table 2. Current Water Quality Issues at Dredging Reaches.

	River Miles		Water Quality			
Company	Current Authorized	Requested	KDHE Monitoring Station	Impairments	TMDLs	
Kaw Valley	9.4 – 10.4	9.4 - 16.9	203	Lead, TP, TSS	Bio/Sed, E Coli, Nutrients/BOD, and chlordanes	
	12.8 – 13.9					
	15.4 – 16.9					
Holliday Sand & Gravel	18.65 – 20.15	18.65 – 20.15				
	21.0 – 21.15	20.55 - 21.15				
Master's Dredging		26.1 - 27.6		255		Cu, PCB, Pb, TP, TSS
		28.3 - 29.8				
	42.6 – 44.1	42.6 – 44.1				
	47.1 – 48.0	47.1 – 48.0				
Penny's Aggregate	45.2 – 46.7	45.2 – 46.7	257		TSS, TP	
	49.6 – 51.35	49.6 – 51.35				
Victory Sand / Meier's Ready Mix	77.1 – 78.6	77.1 – 78.6	257	TSS, TP	FCB, biology	
		90.1 - 91.6				

Aquatic Species and Habitat

Pallid Sturgeons (*Scaphirhynchus albus*) are protected by the Kansas Nongame and Endangered Species Conservation Act, the Federal Endangered Species Act, and state and federal regulations applicable to those acts. In the twenty years since the issuance of the Final EIS and Regulatory Plan governing commercial sand and gravel dredging in the Kansas River, information regarding the status of the pallid sturgeon and its presence in the lower Kansas River has been documented. The extent to which commercial dredging in the River below the Johnson County Water District's weir affects the recovery of the pallid sturgeon in the Missouri River basin should be assessed prior to authorizing that dredging. The proposed dredging reaches also include some segments designated by the state as "special aquatic life use waters" that contain combinations of habitat types and indigenous biota not found commonly in the state, or classified stream segments that contain representative populations of threatened or endangered species listed by the KDW&P or the U.S. Fish and Wildlife service. Fish monitoring data and other habitat assessments have been conducted within the last twenty years that can inform environmental review.

Recreation

Impacts to both the economics and public safety surrounding recreation on the Kansas River should be re-evaluated due to increase in recreational and related business opportunity on the River. The Kansas River is one of only three public rivers in Kansas and is an important

recreation resource for Kansas and Kansas City Metro Area residents. Since the Final EIS, local and state governments, as well as citizen groups, have invested in improvements (boat ramps, access points) to increase recreation and tourism on the river, including historic Kaw Point at the confluence of the Kansas and Missouri rivers. In November 2011 the Department of Interior announced they would support “the designation and development of a “Kansas River Water Trail”” under the President’s America’s Great Outdoors initiative

(<http://www.doi.gov/news/pressreleases/AMERICAS-GREAT-OUTDOORS-Salazar-Highlights-Two-Proposed-Projects-in-Kansas-to-Promote-Outdoor-Recreation-Conservation.cfm>).

The river supports fishing, boating, rowing, kayaking, and other activities. This year saw the first annual “Kawnivore 100”, a 100-mile canoe race on the Kansas River from Manhattan to Lawrence. The river also hosts fishing tournaments that attract national attention. Recreation-based businesses and outfitters rely on maintaining beneficial uses. Dredging operations can pose a public safety concern as intakes and cables stretch into the channel posing obstacles or unseen hazards. Aesthetics and noise pose a nuisance to participants and businesses. Public parks and infrastructure (reservoirs, nature centers, hiking trails, etc) may become degraded or lost due to water quality issues or bed/bank erosion. Potential effects of dredging on maintaining recreational uses of the river must be re-evaluated under current and foreseeable future conditions.

Range of Alternatives

Information and assumptions used to evaluate alternatives in the Final EIS are dated. We recommend the Corps re-examine the range of alternatives, and re-assess all alternatives utilizing current data. Impacts should be evaluated for local and regional economies rather than individual companies or the local dredging industry. The alternatives retained for full analysis in the Final EIS did not include moving to suitable pit mines off-river. The environmental review documents should include analysis of this alternative under current regulatory, economic and environmental conditions. There is currently dredging of several pit mines in the Kansas River floodplain, and this may now prove to be a practicable alternative. According to the Kansas Geological Survey, “studies along the entire river floodplain, based on physical limitations alone, have identified 74 potentially profitable pit-dredging locations”

(<http://www.ksge.ku.edu/Publications/KR/index.html>).

Aquatic Resource of National Importance

The Kansas River is an aquatic resource of national importance. The Kansas River runs for 170 miles and drains approximately 53,000 square miles of Nebraska, Colorado, and Kansas. It is a prairie watershed supporting the Flint Hills and other prairie systems. It supports vital habitats, including Threatened and Endangered species that utilize the river corridor, such as least tern and piping plover, and possibly the pallid sturgeon. As one of only three public rivers in Kansas, it provides unique recreational opportunities attracting participants across the nation. There is vital infrastructure on the Kansas River, including dams, water intakes, and bridges. The river is a

primary source of drinking water for much of northeast Kansas. All these services are of a national importance. The reach of the River from Interstate-635 to the Delaware River is on the National Park Service's Nationwide Rivers Inventory, a designation by the federal government that the River possesses "one or more "outstandingly remarkable" natural or cultural values judged to be of more than local or regional significance"

(<http://www.nps.gov/nrcr/programs/rice/nri/>).

Based on our review of the available information, and in consultation with the U.S. Fish and Wildlife Service, the EPA believes the proposed dredging projects may result in substantial and unacceptable adverse impacts to aquatic resources of national importance, pursuant to Part IV, Paragraph 3(a) of the August 11, 1992, Memorandum of Agreement between our agencies relative to Section 404(q) of the CWA.

In addition to the above referenced concerns, the EPA is evaluating whether the dredge operations may be subject to other CWA permitting authorities.

We appreciate the opportunity to comment on these permits, and would be happy to meet with the Corps to discuss information needs and next steps. If you have any questions regarding our comments, please contact me AT (913) 551-7782 or Vicky Johnson of my staff at (913) 551-7564.

Sincerely,



Karen A. Flournoy

Director

Water, Wetlands and Pesticides Division

cc: Kale Horton, Kansas City District, Corps
Susan Blackford, USFWS
Jason Luginbill, KDW&P
David Bender, KDW&P
Scott Satterthwaite, KDHE

